## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: <u>SF/ALA</u> Rte: <u>80</u> PM: <u>13.2/13.9</u>

File #: 1.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter Report No: WIR-023758

Address: 333 Burma Road Date Inspected: 19-May-2011

City: Oakland, CA 94607

Project Name:SAS SuperstructureOSM Arrival Time:700Prime Contractor:American Bridge/Fluor Enterprises, a JVOSM Departure Time:1530Contractor:American Bridge/Fluor Enterprises, a JVLocation:Jobsite

**CWI Name:** John Pagliero **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

Bridge No: 34-0006 Component: SAS OBG

## **Summary of Items Observed:**

Quality Assurance inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

- 1. 8W PP64 W4 Lifting Lug Holes
- 2. 10W 11W C2 QC-UT
- 3. 9W 10W C1 R1
- 4. 8W 9W E6 Counter Weight Attachment Plates
- 5. 10W 11W C1 (Inside)
- 6. 7W PP56 W4 #1-4 Lifting Lug Holes VT, MT and UT
- 7. 9W 10W D1 and D2 VT, MT and UT
- 1. 8W PP64 W4 Lifting Lug Holes

The QA Inspector noted and periodically observed ABF Mike Jiminez performing Shielded Metal Arc Welding (SMAW) on the Lifting Lug Holes (LLH) located at 8W PP64 W4. The QA Inspector observed the QC John Pagliero as being present in order to monitor the progress and ensure the welding parameters were within the established WPS. The work is in progress and the QA Inspector noted that the work appeared to be in general conformance with the contract documents.

#### 2. 10W 11W C2 (Inside)

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The QA Inspector observed QC Inspector Jesse Cayabyab perform Ultrasonic testing on C2 at 10W 11W inside of the OBG. The QA Inspector noted that the work was in progress and appeared to be in general conformance with the contract documents.

# 3. 9W 10W C1 R1

The QA Inspector noted and periodically observed ABF welder Jorge Lopez performed SMAW on C1. The QA Inspector observed the QC inspector Jesse Cayabyab monitor the progress and ensure the welding parameters were within the established WPS. The QA Inspector noted that the work was completed on this date and appeared to be in general conformance with the contract documents.

## 4. 8W 9W E6 Counter Weight Attachment Plates

The QA Inspector noted and periodically observed ABF welder Gil Perlata perform SMAW on the Counterweight Attachment Plates at 8W 9W E6. The QA Inspector observed the QC inspector monitor the progress and ensure the welding parameters were within the established WPS. The QA Inspector noted that the work was completed on this date and appeared to be in general conformance with the contract documents.

## 5. 10W 11W C1 (Inside)

The QA Inspector randomly observed ABF welding operators Song Tao Huang and Jin Quan Huang performing Flux Core Arc Welding w/gas (FCAW-G) operations on face C1 inside of the OBG. The QA Inspector observed the QC inspector Jesse Cayabyab as being present in order to monitor the progress and ensure the welding parameters were within the established WPS. The work progressed throughout the QA Inspector's shift. Upon completion the QA Inspector noted that the work was in progress and appeared to be in general conformance with the contract documents.

#### 6. 7W PP56 W4 #1-4 Lifting Lug Holes VT, MT and UT

The QA Inspector performed a Magnetic Particle Test (MT) on the LLH's #1 - 4 at 7W PP56 W4. The QA Inspector tested 10% of the weld to verify the weld and testing by QC meet the requirements of the contract documents. The QA Inspector noted that the work appeared to be free of defects and was found to be acceptable and in general conformance with the contract documents. Upon completion of the MT, the QA Inspector performed Ultrasonic Testing utilizing a G.E./Krautkramer USN 60. The QA Inspector also utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

## 7. 9W 10W D1 and D2 VT, MT and UT

The QA Inspector performed a Magnetic Particle Test (MT) on the Bottom Plate welds at 9W 10W D1 and D2. The QA Inspector tested 10% of the weld to verify the weld and testing by QC meet the requirements of the contract documents. The QA Inspector noted that the work appeared to be free of defects and was found to be acceptable and in general conformance with the contract documents. Upon completion of the MT, the QA

# WELDING INSPECTION REPORT

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Inspector performed Ultrasonic Testing utilizing a G.E./Krautkramer USN 60. The QA Inspector also utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination. Upon completion of the testing, it was noted by the QA Inspector that no indications were present and the work was found to be acceptable.

# **Summary of Conversations:**

As noted above





#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer